

Docket No. F-6961

Ser. No. 09/842,931

REMARKS

The Examiner has rejected claims 1, 3, 4, 6-9, 11, 12 and 14-22 under 35 U.S.C. § 103(a) as being unpatentable over Watari et al (USPN 6,154,197) as modified by Yamashita (USPN 5,982,377) and as further modified by Stallkamp (USPN 4,827,250). In response thereto, Applicant provides the above amendment and following traverse.

In the amendments, Applicant clarifies that the coordinate conversion unit reads the data of a predetermined plurality of perspective conversion matrices different from each other, and performs the conversion by using each of the predetermined plurality of matrices at the same time to produce the predetermined plurality of sets of vertex coordinates defining the predetermined plurality of three-dimensional objects.

The first feature of the present invention is that "the basic data of one three-dimensional object and the data of the predetermined plurality of conversion matrices are used to produce the predetermined plurality of three-dimensional objects. In other words, the predetermined plurality of different conversion matrices are applied to the basic data of one three-dimensional object to produce many three-dimensional objects of the number identical to the number of the matrices. For example, N (= certain plural number) three-dimensional objects are produced by applying the N conversion matrices to the basic data of one object. This feature is disclosed in

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the specification, page 11, lines 4 to 18. Particularly, at lines 13 to 16, it is described that the plural objects of the cartridge brasses are produced whose number is equal to the number of the conversion matrices. In this way, the many three-dimensional objects like the cartridge brasses can be produced from the basic data of one object along with a predetermined plurality of conversion matrices whose number is equal to the number of the three-dimensional objects to be produced.

In addition, the claimed game system has a second feature in that the image processor forms all of the predetermined plurality of three-dimensional objects of an identical shape at different positions at the same time. As a result, the display as shown in FIG. 5 can be obtained.

Based on the above discussion of the invention and the following discussion of the references, Applicant respectfully asserts that the combination of Watari, Yamashita and Stallkamp fail to teach or suggest the above first and second features of the amended claims. Accordingly, the references fail to render the claims unpatentable. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974) (a prima face case of obviousness is established only where the combination of cited references teaches or suggests each limitation in the claim).

With respect to the first feature, the Examiner asserts that Yamashita discloses utilizing six conversion matrices at the same time to perform

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conversion processing. However, column 10, lines 6 to 31, of Yamashita teaches applying six conversion matrices to one graphic data to produce one graphic data of one object observed from one specific viewpoint. On the contrary, in the present invention, a predetermined plurality of matrices are applied to the original data of one object to produce the predetermined plurality of objects. More specifically, Yamashita teaches manipulating the six matrices via multiplication, and such multiplication disables the production of a predetermined plurality of objects at the same time. Therefore, the references fail to teach or suggest the claimed coordinate conversion unit so that the references fail to render the claims unpatentable.

With respect to the second feature, the Examiner states that Stallkamp discloses producing 3D objects of identical shape at different positions. However, Stallkamp fails to teach or suggest producing such objects at the same time. That is, Stallkamp teaches producing such objects from the basic data and does not consider producing a predetermined plurality of objects, as recited, at the same time.

Indeed, none of the references consider producing a plurality of three-dimensional objects from one basic data and a predetermined plurality of conversion matrices at the same time and displaying them at the same time, as illustrated in FIG. 5 of the application. Therefore, the combination of the references fails to teach the first and second features of the amended claims.

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Based on the above analysis, Applicant asserts that the amended claims are patentable over the references and that the application is now believed to be in proper form for allowance of all claims and notice to that effect is earnestly solicited.

The USPTO is hereby authorized to charge any fee(s) or fee(s) deficiency or credit any excess payment to Deposit Account No. 10-1250.

Respectfully submitted,
JORDAN AND HAMBURG LLP

By Frank J. Jordan

Frank J. Jordan

Reg. No. 20,416

Attorney for Applicants

by T. B. B. B.
12/18/20

Jordan and Hamburg LLP
122 East 42nd Street
New York, New York 10168
(212) 986-2340